

WHAT IS CLAIMED IS:

- 1        1. A submersible device for attracting and stimulating aquatic animals, said device  
2 comprising:
  - 3            a watertight housing;
  - 4            a first transducer element disposed within said housing; and
  - 5            a diaphragm operably connected to said first transducer element,  
6            wherein said device is operable as either a speaker or a hydrophone in response to  
7            control signals received from a programmable device above water; and  
8            wherein said device emits one or more prerecorded acoustical signals in a  
9            specified sequence and at a specified volume in response to control signals  
10          received from said programmable device above water; and  
11          wherein said one or more prerecorded acoustical signals comprise sounds of prey  
12          being attacked and eaten underwater.
- 1        2. The submersible transducer device as claimed in claim 1, further comprising:
  - 2            a second transducer element disposed within said housing; and
  - 3            a second diaphragm operably connected to said second transducer element,  
4            wherein said second transducer element is positioned opposite said first  
5            transducer element.
- 1        3. The submersible transducer device as claimed in claim 1, further comprising a  
2          flotation device coupled to said housing.

1       4. A system for attracting and stimulating aquatic animals, said system comprising:  
2            a submersible device comprising a transducer element disposed within a  
3            watertight housing; and  
4            a programmable control unit operably connected to said submersible device, said  
5            programmable control unit comprising:  
6            a processor;  
7            a memory device operably connected to said processor, for storing a  
8            plurality of digital sound recordings; and  
9            an input device operably connected to said processor, for selecting one or  
10           more of said plurality of digital sound recordings to be played via  
11           said submersible device according to a pre-selected program,  
12           wherein said submersible device is responsive to control signals received from  
13           said programmable control unit.

1       5. The system as claimed in claim 4, wherein said control signals comprise signals  
2       for controlling volume of playback.

1       6. The system as claimed in claim 4, wherein said control signals comprise signals  
2       for sweeping volume of playback within a selected range of volume levels.

1       7. The system as claimed in claim 6, wherein said control signals further comprise a  
2       time interval between changes in said volume levels.

1       8. The system as claimed in claim 4, wherein said control signals comprise a delay  
2       signal.

1       9. The system as claimed in claim 4, wherein playback of said one or more of said  
2       plurality of digital sound recordings is intermittent.

1       10. The system as claimed in claim 4, wherein said plurality of digital sound  
2       recordings comprise an audio recording of fish in distress.

1       11. The system as claimed in claim 4, wherein said plurality of digital sound  
2       recordings comprise an audio recording of prey being attacked and eaten underwater.

1           12. The system as claimed in claim 4, wherein said transducer element is positioned  
2           opposite from a second transducer element within said housing.

1           13. A method for attracting and stimulating aquatic animals, said method comprising  
2           the steps of:

3                   selecting one or more digital sound recordings from a memory device which  
4                   stores a plurality of digital sound recordings;  
5                   selecting a delay period;  
6                   repeatedly transmitting a signal to an underwater transducer device,  
7                   wherein said signal corresponds to the one or more digital sound recordings; and  
8                   wherein successive transmissions of the signal are separated by the delay period;  
9                   and  
10                  wherein said plurality of digital sound recordings include recordings of aquatic  
11                  animals feeding.

1           14. The method as claimed in claim 13, further comprising the step of selecting a  
2           sequential arrangement of digital sound recordings from the plurality of digital sound recordings.

1           15. The method as claimed in claim 14, further comprising the step of selecting an  
2           individual volume level for each of said digital sound recordings in said sequential arrangement.

1           16. The method as claimed in claim 13, further comprising the step of gradually  
2           increasing the volume level of the signal up to a selected maximum volume level.

1           17. The method as claimed in claim 16, further comprising the step of selecting an  
2           interval of time between increases in the volume level.

1           18. The method as claimed in claim 13, further comprising the step of receiving  
2           acoustical signals from said underwater transducer device.

1           19. The method as claimed in claim 18, further comprising the step of comparing one  
2           or more characteristics of said acoustical signals to one or more characteristics of said plurality  
3           of digital sound recordings.

1        20. The method as claimed in claim 13, further comprising the step of recording  
2        acoustical signals received from said underwater transducer device.